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APPLICATION FOR UNITED STATES LETTERS PATENT

Title:

**CASCADABLE FILE JACKETS**

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**CASCADABLE FILE JACKETS**

**TECHNICAL FIELD**

**[0001]** The cascadable file jacket disclosed herein relates generally to office organizational systems. In particular, the cascadable file jacket is configured for the storage, display, and organization of paper materials in a hanging or supine position.

**BACKGROUND**

**[0002]** The desks and workspace of office workers are often cluttered with papers, periodicals, notes, and other assorted office paraphernalia that make organization difficult, if not impossible. Observational data shows that office workers tend to organize their workspace according to two different methodologies, some workers pile paperwork and files around their workspace, while others continuously file and organize the paperwork around their workspace. Each method has distinct advantages and disadvantages, piling provides easy access to the loose paper but limits the amount of workspace available for day-to-day usage. Filing systematically organizes and stores paperwork and, in turn, frees workspace, but requires a time consuming system and dedicated usage to be effective.

**[0003]** Known organizational systems, such as letter boxes or vertical files, typically occupy out-of-the-way portions of the workspace or office that makes visual identification of paperwork difficult and time consuming. Generally, it would be desirable to provide an organizational system that offered visual organization and easy identification of important and useful paperwork while enabling items of various shapes and sizes to be easily stored.

**BRIEF DESCRIPTION OF THE DRAWINGS**

**[0004]** The figures described herein are intended to be illustrative and not limiting of an exemplary embodiment of a display platform in which:

FIG. 1 illustrates an isometric view of an embodiment of a cascadable file jacket system;

FIG. 2 illustrates a plan view of a flexible substrate shown in FIG. 1;

FIG. 3 illustrates an enlarged cross-sectional view of an edge of the flexible substrate of FIG. 2;

FIG. 4 illustrates an isometric view of a file jacket shown in FIG. 4;

FIG. 5 illustrates a plan view of a file jacket shown in FIG. 1;

FIG. 6 illustrates a plan view of a file jacket blank;

FIG. 7 illustrates a top perspective view of the file jacket of FIG. 4 in a closed position; and

FIG. 8 illustrates a top perspective view of the file jacket of FIG. 4 in an open position.

#### **DETAILED DESCRIPTION**

**[0005]** FIG. 1 illustrates an exemplary embodiment of a cascadable file jacket system 10 that includes a flexible substrate 12 and a plurality of file jackets 14 configured for use within a workspace active zone. The active zone is generally defined as a portion of the desktop or workspace in which work is actually being conducted, as opposed to space used for storage, or filing of materials.

**[0006]** The cascadable file jacket 10 described herein may be wall mounted, hung from a partition, laid horizontal on a free surface, or inclined against a suitable vertical surface, to provide organization and quick identification of important materials while simultaneously removing desktop clutter and piles. It will be understood that the flexible substrate 12, when used in an inclined orientation, may be configured to include an easel mechanism (not shown) which can be, but is not limited to, a foldable triangular stand or at least one foldable leg fixedly attached to the flexible substrate 12. Further, the cascadable file jacket system 10 is arranged so that the flexible substrate and the plurality of attached file

jackets 14 may be moved within the workspace active zone simply by relocating or reorienting the flexible substrate 12.

[0007] FIG. 2 further illustrates the flexible substrate 12 as a roughly rectangular shape defined by a first longitudinal edge 16, a second longitudinal edge 18, a first narrow end 20 and a second curvilinear narrow end 22. The flexible substrate 12 may be manufactured from any suitable plastic or color, depending on the application including, but not limited to, translucent or smoke-colored polyethylene (PE) or poly-sheet material.

[0008] The flexible substrate 12 may be manufactured using a variety of processes such as, for example, stamping, punching or rotary die cutting. FIG. 3 illustrates an enlarged view of an edge, as indicated by the section line 3-3, produced by a typical punching or cutting process. The first longitudinal edge 16 typically includes a smooth cut surface 24 and a rough tear-away surface 26. The smooth cut surface 24 may be formed when the sharp working edge of a cutting tool (not shown) pierces the flexible substrate 12, e.g. the polyethylene (PE) material, to a predetermined depth. Upon reaching the predetermined depth, generally two-thirds of the component thickness depending on the component material elasticity, the shear force created by the cutting tool encourages the remaining material to tear and creates the rough surface 26.

[0009] Returning to FIG. 2, the flexible substrate 12 further includes first and second mounting holes 28, 30 formed adjacent to the second curvilinear narrow end 22. The curvilinear narrow end 22 may be formed to provide an aesthetic arc and an accessible location for the first and second mounting holes 28, 30. Typically, the first and second mounting holes 28, 30 are aligned along the imaginary line L, and define a right angle with respect to the first and second longitudinal edge 16, 18. The first and second mounting holes 28, 30 are aligned in this way allow the flexible substrate 12 to be vertically suspended by hooks or any other

hanging device from available vertical surfaces. The first and second mounting holes 28, 30 may each include a grommet 32, or metal reinforcing ring, affixed to an interior surface (not shown) of the first and second mounting holes 28, 30. The grommet 32 reinforces the flexible substrate 12 and prevents the combined weight of the cascable file jacket 10 and the stored paperwork from distorting or ripping the first and second mounting holes 28, 30. Additional mounting holes may be provided so that the flexible substrate 12 can be hung in different orientations.

[0010] FIG. 4 illustrates a perspective view of the expandable file jacket 14. The file jacket 14 includes a first ply 36 and a moveable second ply 38 arranged to form an interior pocket 40 capable of accepting a numerous sheets of 8.5in x 11in, 8.4in x 14in and/or A4-size paper. It will be understood that the interior pocket can be sized to accept a single size of paper, or can be sized to accept multiple sizes depending on the needs of the user and/or the desired versatility of the file jacket system 10. The second ply 38 may further include a label flap 42 folded along a foldline 44 and adapted to accept and protect a label 36, see FIG. 5. The label 34 may be affixed to the interior surface of the label flap 42 such that it is visible through and protected by the second ply 38. The label flap 42 and label 34 cooperate to facilitate visual identification of the contents stored in the interior pocket 40.

[0011] The first ply 36 is formed to include an attachment tab 46 folded along a foldline 48 and adapted to engage a back surface 50, adjacent to the first longitudinal edge 16 (see FIG. 2 and 4), of the flexible substrate 12. The first ply 36 is foldably connected to the second ply 36 along the foldline 52. It should be noted that the foldline 52, or any other foldline identified herein, may be scored to facilitate folding of the different plies or tabs. The second ply 38 further includes an expanding attachment tab 54 formed along a foldline 52 and adapted to engage the back surface 50 of the flexible substrate 12 adjacent to the

second longitudinal edge 18, see FIGS. 7 and 8. The expanding attachment tab 54 further includes a bonding portion 60 distal to the foldline 52, and a flexible portion 62. The flexible substrate 12 may be aligned within a first and second crease 56, 58 defined by the cooperation of the first ply 36 and attachment tab 46, and the first ply 36 and the expanding attachment tab 54, respectively.

**[0012]** FIG. 5 illustrates a plan view of the folded file jacket 14. The file jacket 14 is shown having a roughly triangular shaped second ply 38 defined by the cooperation of the perimeter foldlines 44, 48, 52 and 78. The label 34 can be seen positioned between the label flap 42 and the second ply 38 so that it is visible through the translucent material of the file jacket 14. Further, the attachment tab 54 is arranged to form the second crease 58 prior to affixing the bonding portion 60 to the back side 50 of the flexible substrate 12.

**[0013]** FIG. 6 illustrates the file jacket 14 as an unfolded blank 68 or poly-sheet prior to folding and assembly. The first ply 36 and the second ply 38 each roughly form a right triangular shape, mirrored about the foldline 52. The first ply 36 and the expanding attachment tab 54 are bendable relative to the second ply 38 along the foldline 52. The attachment tab 54 includes an angled edge 70 that is collinear to the foldline 44 along the angled side of the triangular shaped second ply 38. This collinear arrangement provides for the second ply 36, the label flap 42 and expandable attachment tab 54 to share a common apex, identified by the numeral 72. The attachment tab 54 is separated from the first ply 36 along a cutaway line 74, which allows the attachment tab 54 to move independent of the first ply 36. The second ply further includes a closure tab 76 foldable along the foldline 78.

**[0014]** In order to construct the file jacket 14, as illustrated in FIG. 4, it may be helpful depending on the type, thickness and/or elasticity of the blank 68 material, to score, cut or pre-fold the foldlines 44, 48, 52, 66 and 78. Initially, the label flap 42 is folded along the foldline 44 to

rest adjacent to the second ply 38. The blank 68, in turn, is folded along the foldline 52 such that the first ply 36 and the second ply 38 are aligned with, and adjacent to, with each other. The closure tab 76 is folded along the foldline 78 to engage the first ply 36. Finally, the closure tab 76 may be affixed to the first ply 36 using, for example, a heat staking process to close and seal the interior pocket 40 and create the file jacket 14.

**[0015]** Heat staking is a versatile assembly process that requires a short cycle time, can simultaneously form multiple bonds, and does not require consumable material such as rivets or staples. In the above-described example, the closure tab 76 and the first ply 36 are positioned between a heated stud (not shown) and a complimentary hole (not shown) to form a heat staked head 80, shown in FIGS. 4 and 5. The heat staked head 80 is formed when the heated stud conductively engages the first ply 36 and the closure tab 76 to increase the material temperature to near its melting point. The heated stud cooperates with the complimentary hole to deform the malleable materials of the first ply 36 and the closure tab 76 and form a mechanical lock between the two poly-sheets. Heat staking may be used to join dissimilar plastics, such as the file jacket 14 and the flexible substrate 12, or plastics to other materials (e.g. metals). Another benefit associated with the heat staking process is the ability to disassemble the locked components by reapplying heat to the heat staked head 80 to release the mechanical lock. It will be understood that other methods of bonding or attachment of the various layers and plies are also possible, including but not limited to, ultrasonic welding, adhesives, rivets or other fasteners, stitching etc.

**[0016]** FIG. 7 illustrates the file jacket 14 in an unexpanded configuration and arranged to engage the flexible substrate 12. The flexible substrate 12 is positioned within the first and second crease 56, 58 of the file jacket 14 and fixedly attached to the back surface 50 along the bonding portion 60 and a bonding edge 64. The bonding portion 60

and the bonding edge 66 may then be heat staked to the back surface 50, thereby attaching the file jacket 14 to the flexible substrate 12.

[0017] In use, the bonding portion 60 of the expanding attachment surface 54 is folded along the foldline 66 in the direction of the second longitudinal edge 18 and the second crease 58. When assembled, the file jacket 14 is affixed to the back surface 50 of the flexible substrate 12 along two points, i.e. the bonding edge 64 and the bonding portion 66, thereby allowing the first ply 36 and the second ply 38 float relative to the front surface of the flexible substrate 12. By arranging the file jacket 14 to float relative to the flexible substrate 12 the storage capacity of the interior pocket 40 can be increased by allowing the first ply 36 to deform relative to the second ply 38. Further, because the first ply 36 does not directly attach to the flexible substrate 12, the user may position material between the for additional storage and/or decoration.

[0018] FIG. 8 illustrates the file jacket 14 in an expanded configuration. The file jacket 14 is expanded when the second ply 38 is pulled away from the first ply 36, relative to the unexpanded configuration shown in FIG. 7. By moving the second ply 38 away from the first ply 36, the flexible portion 62 of the expanding attachment tab 54 is stretched taut along the second crease 58. As the attachment tab 54 is stretched, the infolded bonding portion 60 is straightened and stretched to provide additional storage space in the interior pocket 40.

[0019] While the cascable file jacket 10 has been described with reference to specific examples, these examples are intended to be illustrative only and not limiting in any way. It will be apparent to those of ordinary skill in the art that changes, modification or deletions may be made to the disclosed embodiments without departing from the spirit and scope of the disclosed device.